

MILCO DAIRY

**FRANKLIN TOWNSHIP,
HENRY COUNTY, INDIANA**

STORMWATER POLLUTION PREVENTION PLAN FOR DAIRY OPERATIONS

March 2, 2005

Prepared For:
**Milco Dairy LLC
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9302 S CR 275 E
Lewisville, IN 47352**

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**STORMWATER POLLUTION PREVENTION PLAN
FOR
DAIRY OPERATIONS**

MILCO DAIRY

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**POLLUTION PREVENTION PLAN
FOR STORM WATER FROM
DAIRY OPERATION**

MILCO DAIRY

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A. FACILITY NAME, CONTACT AND BACKGROUND INFORMATION

1. Name of Operation: Milco Dairy

2. Location of Operation:

a. Address: 9302 S CR 275 E Lewisville, IN

b. Township: Franklin

c. County: Henry

3. Owner:

a. Name: Milco Dairy LLC

b. Mailing Address: 9302 S CR 275 E

c. Business Phone: (b) (6)

d. Home Phone: (b) (6)

e. Cell Phone: (765) 524-0664

f. Pager: N/A

4. Operator/ Manager

a. Name: Nico Niessen, Member

b. Mailing Address: 9302 S CR 275 E

c. Business Phone: (765) 987-0149

d. Home Phone: (b) (6)

e. Cell Phone: (b) (6)

f. Pager: N/A

5. Operational Background Information:

a. Year Facility Began Operating: 1999

b. Current Approximate Number of Cows: 1076

1. Lactating: 935

2. Dry: 98

3. Spring heifer 43

B. RECEIVING WATER(S)

The recipient of stormwater from the production facility is an unnamed tributary of the Flat Rock River.

C. SOILS MAP

A soils map, with the boundaries of the production facility outlined to indicate the types of soils found on the production facility, is included in Appendix B.

D. TOPOGRAPHIC MAP WITHIN 500' OF PRODUCTION AREA

A topographic map, with the boundaries of the production facility outlined indicating receiving water(s) and water wells within five hundred (500) feet of the production area is included on the Farmstead Plan Drawing in Appendix C.

E. FARMSTEAD PLAN OF PRODUCTION FACILITY

A farmstead plan of the production facility at a one-inch equals 60 feet scale is included in Appendix C and includes the following:

- i. All structures at the production facility
- ii. On-site drainage patterns
- iii. Discharge conveyances
- iv. Discharge points at the facility boundary
- v. On-site and adjacent water bodies
- vi. Outline of the drainage area for each storm water outfall
- vii. Outline of the impervious surfaces
- viii. On-site wells

- ix. Existing structural control measures
- x. Location of fueling stations and associated tanks
- xi. Vehicle and equipment storage and maintenance areas
- xii. Loading/unloading areas
- xiii. Locations used for treatment, storage, and disposal wastes
- xiv. Mortality handling areas
- xv. Monitoring locations
- xvi. Dust or particulate generating process areas
- xvii. Vehicular access roads

F. POTENTIAL POLLUTANT SOURCES

- 1. The plan should identify all activities and significant materials that may reasonably be expected to add significant amounts of pollutants to storm water draining from the facility.**

The facility will be designed and operated such that there will be no activities and significant material that may reasonably be expected to add significant amounts of pollutants to stormwater from the facility.

- 2. The plan should contain a narrative description of the potential pollutant sources from the following activities: immediate access roads and rail lines used or traveled by carriers of raw materials, waste material, or by-products used or created by the facility; refuse sites; sites used for the storage and maintenance of material handling equipment; and shipping and receiving areas. The description should specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter of concern should be identified.**

This information has been summarized in the Materials, Measures and Control Practices Summary Table included in Appendix E.

G. MEASURES AND CONTROLS

1. **The description of storm water management controls should address the following minimum components, including a schedule for implementing such controls:**
 - a. **Good Housekeeping** - All areas that may contribute pollutants to storm water discharges should be maintained in a clean, orderly manner. Requirements for specific areas are included in the Summary Table in Appendix F.
 - b. **Preventative Maintenance** - A preventative maintenance program for the facility has been prepared as part of the Supplemental Environmental Plan per IDEM agreement and has been included as Appendix G.
 - c. **Inspections** - Self-monitoring Inspections of the stormwater monitoring devices are currently being monitored at the facility as part of the Supplemental Environmental Plan per IDEM agreement. These records are maintained in the farm operating record.
2. **Sediment and Erosion Control and Management of Storm Water Runoff –** Appropriate sediment and erosion control measures will be incorporated and implemented in accordance with the Rule 5 Stormwater Plan to be prepared with construction activities.
3. **The description should also include an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory should include a narrative description of the following:**
 - a. **Significant materials that are treated, stored, or disposed of in a manner to allow exposure to storm water. Significant materials are**

those that when exposed to precipitation there is a release of constituents that could cause storm water runoff to be contaminated.

- b. Method and location of onsite storage or disposal of significant materials.
- c. Paved, dirt or gravel parking areas for storage of vehicles to be maintained.
- d. Materials management practices employed to minimize contact of materials with storm water run-off.
- e. The location and description of existing structural and nonstructural control measures to reduce pollutants in storm water run-off.
- f. A description of any treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge.

This information has been summarized in the Material, Measures and Control Practices Summary Table included in Appendix F.

H. GENERAL REQUIREMENTS

1. Record-Keeping

The Plan is to be maintained on-site.

2. Plan Review

The plan should be reviewed periodically, at a minimum annually, for changes and improvements at the facility.

3. Plan Amendment

The plan must be amended within 90 days of a change in design, construction, operation or maintenance at the facility that will have or has the potential to have a significant effect on the potential for the discharge of pollutants.

4. Plan Implementation

Plan implementation will begin with construction of the silage pond and associated features in accordance with EPA and IDEM approvals.

5. Spill Prevention and Response Plan

The Emergency Response Plan for the facility is included as Appendix H.

APPENDIX A

Definitions

25-YEAR, 24-HOUR STORM EVENT: means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years (i.e., a storm event that has a 4% chance of happening in any given year) as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed there from. Current information can be found in "Rainfall Frequency Atlas of the Midwest" (Bulletin 71, 1992, F.A. Huff and J.R. Angel, Midwestern Climate Center and the Illinois State Water Survey, Champaign, IL).

100-YEAR, 24-HOUR STORM EVENT: means the maximum 24-hour precipitation event with a probable recurrence interval of once in 100 years (i.e., a storm event that has a 1% chance of happening in any given year) as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed there from. Current information can be found in "Rainfall Frequency Atlas of the Midwest" (Bulletin 71, 1992, F.A. Huff and J.R. Angel, Midwestern Climate Center and the Illinois State Water Survey, Champaign, IL).

ANIMAL FEEDING OPERATION (AFO): is defined in 40 CFR 122.23(b)(1) as: "...a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (i) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and (ii) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

BEST MANAGEMENT PRACTICES (BMPs): means schedules of activities, prohibitions of practice, maintenance procedures, and other management practices to prevent or reduce the pollution of water of the United States. Best Management Practices also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

CHRONIC RAINFALL: means a series of wet weather conditions that preclude manure removal from a properly designed, constructed, maintained, and operated manure storage or treatment facility, precludes land application of manure in accordance with this permit, and exceeds the documented and/or State approved chronic rainfall design storage value used in the design of the manure storage or treatment facility.

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO): means an AFO that is defined as a large CAFO or as a medium CAFO, or that is designated as a CAFO by the Director or Regional Administrator. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

CONFINED FEEDING: as defined in IC 13-11-2-39, means the confined feeding of animals for food, fur, or pleasure purposes in lots, pens, ponds, sheds, or buildings where: (1) animals are confined, fed, and maintained for at least forty-five (45) days during any twelve (12) month period; and (2) ground cover or vegetation is not sustained over at least fifty percent (50%) of the animal confinement area.

(b) The term does not include the following:

(1) A livestock market:

(A) where animals are assembled from at least two (2) sources to be publicly auctioned or privately sold on a commission basis; and

(B) that is under state or federal supervision.

(2) A livestock sale barn or auction market where animals are kept for not more than ten (10) days.

CONFINED FEEDING OPERATION: as defined in IC 13-11-2-40, means any:

(1) confined feeding of at least:

(A) three hundred (300) cattle;

(B) six hundred (600) swine or sheep; or

(C) thirty thousand (30,000) fowl;

(2) animal feeding operation electing to be subject to IC 13-18-10; or

(3) animal feeding operation that causes a violation of:

(A) water pollution control laws;

(B) any rules of the water pollution control board; or

(C) IC 13-18-10.

CONTAMINATED RUN-OFF: means any precipitation or surface water that has come into contact with any liquid or solid animal excreta or any used bedding, litter, or waste liquid at the confined feeding operation or other animal feeding operation.

DEPARTMENT: refers to the Indiana Department of Environmental Management.

DISCHARGE: for purposes of this article, means any addition of any pollutant, or combination of pollutants, into any waters of the state from a point source. The term includes, without limitation, an addition of a pollutant into any waters of the state from the following:

(1) Surface run-off that is collected or channeled by human activity.

(2) Discharges through pipes, sewers, or other conveyances, including natural channels that do not lead to treatment works.

FILTER STRIP: means a relatively uniform and maintained vegetated area used for collecting sediment and cleansing run-off.

FLOOD PLAIN: means any area adjoining a river, stream, or lake that has been or may be covered by a one hundred (100) year flood.

FLOODWAY: means the channel of a river or stream and those portions of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the peak flood flow of a one hundred (100) year flood as determined by 310 IAC 6.

FREEBOARD: means the linear distance in feet from the top of the water surface measured vertically to the lowest possible overflow elevation (i.e., the top of the bank of the lagoon/storage/retention structure or any overflow structure).

GROUND WATER: means such accumulations of underground water, natural or artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state, but excluding manmade underground storage or conveyance

HIGHLY ERODIBLE LAND: means land that has a high potential to erode based on site-specific characteristics, such as slope length and steepness, rainfall, run-off, wind, soil type, and soil conditions.

KARST TERRAIN: means an area where karst topography, including the characteristic surface and subterranean features, has developed as the result of dissolution of lime stone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include the following:

- (1) Sinkholes.
- (2) Sinking streams.
- (3) Caves.
- (4) Large springs.
- (5) Blind valleys.

LARGE CAFO: means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories: (i) 700 mature dairy cows, whether milked or dry; (ii) 1,000 veal calves; (iii) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs; (iv) 2,500 swine each weighing 55 pounds or more; (v) 10,000 swine each weighing less than 55 pounds; (vi) 500 horses; (vii) 10,000 sheep or lambs; (viii) 55,000 turkeys; (ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system; (x) 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; (xi) 82,000 laying hens, if the AFO uses other than a liquid manure handling system; (xii) 30,000 ducks (if the AFO uses other than a liquid manure handling system); (xiii) 5,000 ducks (if the AFO uses a liquid manure handling system).

MANURE: means any of the following wastes used in or resulting from the production of animals or direct agricultural products such as milk or eggs: animal excreta, discarded products, bedding, litter, process wastewater, process generated wastewater, waste feed, silage drainage and leachate, and compost products resulting from mortality composting or the composting of animal excreta.

MANURE STORAGE OR TREATMENT FACILITY: means any excavated, diked, or walled structure or combination of structures designed for the biological stabilization, holding, or storage of manure. This includes all collection ditches, conduits and swales for the collection of runoff from the production area and wastewater that is routed to the manure storage or treatment structure.

MANURE TRANSFER SYSTEM: means any pipes, lift stations, pumps, or other stationary devices used for the transfer of manure.

SURFACE WATER: means water present on the surface of the earth, including:

- (1) streams;
- (2) lakes;
- (3) ponds;
- (4) rivers;
- (5) swamps;
- (6) marshes; or
- (7) wetlands.

MEDIUM CAFO: means any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a medium CAFO if: (1) The type and number of animals that it stables or confines falls within any of the following ranges: (i) 200-699 mature dairy cows, whether milked or dry; (ii) 300-999 veal calves; (iii) 300-999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs; (iv) 750-2,499 swine each weighing 55 pounds or more; (v) 3,000-9,999 swine each weighing less than 55 pounds; (vi) 150-499 horses; (vii) 3,000-9,999 sheep or lambs; (viii) 16,500-29,999 turkeys; (ix) 9,000-29,999 laying hens or broilers, if the AFO uses a liquid manure handling system; (x) 37,500-124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; (xi) 25,000-81,999 laying hens, if the AFO uses other than a liquid manure handling system; (xii) 10,000-29,999 ducks (if the AFO uses other than a liquid manure handling system); (xiii) 1,500-4,999 ducks (if the AFO uses a liquid manure handling system) and (2) Either one of the following conditions are met: (A) pollutants are discharged into water of the State through a man-made ditch, flushing system, or other similar man-made device; or (B) pollutants are discharged directly into waters of the State which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation. An AFO may also be designated as a medium CAFO if it discharges by a method other than provided in (A) and (B).

OVERFLOW: means the discharge of manure resulting from the filling of manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structures.

POLLUTANT: means the following as defined under 40 CFR 122.2: "dredged spoil, solid waste, incinerator residue, filter back-wash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or

discarded equipment, rock, sand, cellar dirt and industrial municipal, and agricultural waste discharged into water."

PROCESS WASTEWATER: means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning or flushing pens, barns, manure pits or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; and dust control. Process wastewater also includes any water which comes into contact with any raw materials, products or byproducts, including manure, litter, feed, milk, eggs or bedding.

PRODUCTION AREA: means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, bedding materials, and areas used for storage of pesticides, herbicides, disinfectants, pharmaceuticals, and fertilizers. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production areas is any egg washing or egg processing facility, and any area used in the storage, handling, treatment or disposal of mortalities.

SMALL CAFO: means an AFO that is designated as a CAFO and is not a Medium CAFO.

SPILL: means a discharge, usually (but not exclusively) a small, inadvertent discharge of manure, toxic pollutant or hazardous substance, not caused by weather conditions.

VEGETATED BUFFER: means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

WASTE MANAGEMENT SYSTEM means any method of managing manure at the confined feeding operation or other animal feeding operation, including:

- (1) manure storage structures;
- (2) manure transfer systems;
- (3) manure treatment systems, such as:
 - (A) a constructed wetland;
 - (B) a vegetative management system;

- (C) a wastewater treatment system under a valid national pollutant discharge elimination system (NPDES) permit; or
- (D) another system approved by the commissioner;

WATER QUALITY STANDARDS: defined in 40 CFR 130.2(d) as: "Provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act." The State of Ohio's water quality standards are contained in Ohio Administrative Code (OAC) 3745-1.

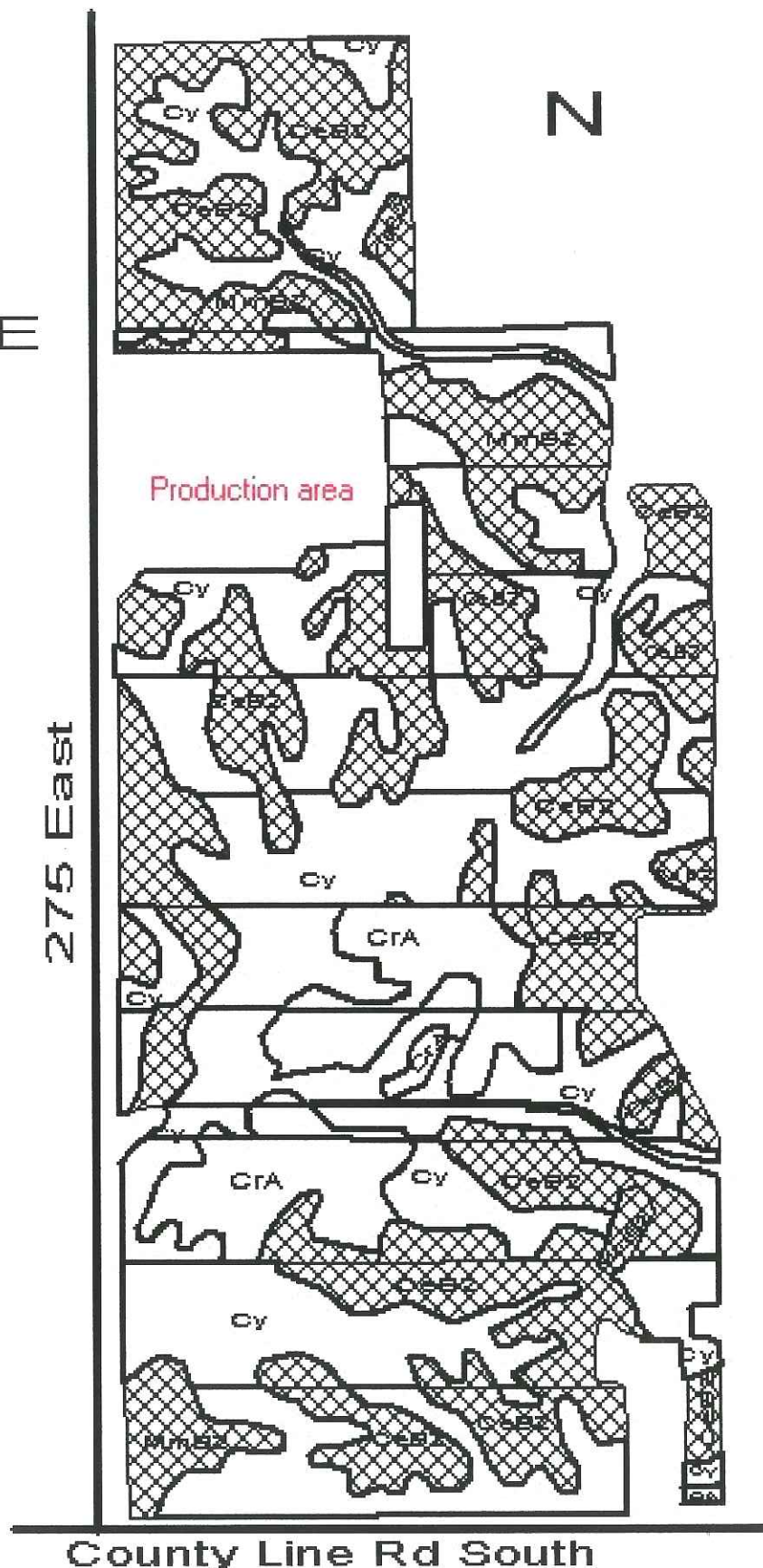
APPENDIX B

Milco Dairy **Farmland East** **Sect. 29 & 32** **Franklin Twp.-SE** **Henry County** **309 Acres GPS**

Consulting Services
 Gordon & Associates
 P. O. Box 25
 Bentonville, IN 47322
 Mobile 765-969-2277
 WATTS 1-800-659-7645

Manure Application Map
 Surface App. on Frozen Ground Restrictions
 Restrictions

 Solitypes with 2% or greater slope
 132.48 acres



APPENDIX C